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ABSTRACT

This study examined the perceptions of African American college students about the campus environment at a predominantly white university, using reflexive photographs and photo elicitation interviews. Five female and five male students were asked to take photographs on campus that illustrated their impressions of the university or that would help them to describe their impressions. Participants also recorded their thoughts and feelings about the campus in a notebook and completed interviews in which they were asked to interpret their photographs. Six overall impressions of the campus emerged: campus beauty; consciousness of being black; influence of Greek-letter organizations; prevalence of voluntary racial and cultural separation; and preparation for the future. The participants also reported that the employment of an alternative data representation promoted a deep level of reflective thinking, one that they thought went deeper than if they had been asked only to participate in interviews. Some of the students also reported that the visual component increased their level of commitment to completing participation in the study. (Contains 55 references.) (MDM)

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Seeing as well as Hearing: Responses to the Use of an Alternative Form of Data Representation in a Study of Students' Environmental Perceptions

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"Art Museum & red structure"
Taken by Tiffany.

"Sculpture"
Taken by James.

Working paper presented at the annual meeting of the Association for the Study of Higher Education, Miami, FL, November 1998.

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This paper was presented at the annual meeting of the Association for the Study of Higher Education held in Miami, Florida, November 5-8, 1998. This paper was reviewed by ASHE and was judged to be of high quality and of interest to others concerned with higher education. It has therefore been selected to be included in the ERIC collection of ASHE conference papers.

Abstract

This paper highlights the conceptual underpinnings for using photography as another method of gathering data in the qualitative inquiry process. Responses to the use of reflexive photographs as an alternative form of data representation in a study of first-year, African American students' environmental perceptions also are presented.

In a keynote address at the 1996 Conference on Qualitative Research in Education, Elliot Eisner said, "The theme of this [address]--alternative forms of data representation--resides on the cutting edge of inquiry in research methodology. One of the basic questions scholars are now raising is how we perform the magical feat of transforming the contents of our consciousness into a public form that others can understand" (Eisner, 1997, p. 4). The purpose of this paper is highlight the conceptual underpinnings for using photography as another--or "alternative"--method in which perceptual data can be conveyed in order to enhance what is known about phenomena of interest. Also, responses to the use of reflexive photographs as an alternative form of data representation in a study of first-year, African American students' environmental perceptions is presented.

The Uses of Photography in Qualitative Inquiry

Visual imagery has long been a fascination of people in many cultures, including the United States (Collier & Collier, 1986; Denzin & Lincoln, 1994; Kyvig & Marty, 1982; Monroe, 1993; Seidman & Beilin, 1984; Worth & Adair, 1972). Collier and Collier (1986) wrote, "Man [*sic*] has always used images to give form to his [*sic*] concepts of reality" (p. 8). Since the advent of photography in the 1830s and the eventual widespread availability of inexpensive cameras, the use of cameras has led to the proliferation of visually-oriented cultural artifacts that serve as rich sources of information and research data (Ball & Smith, 1992; Cheatwood & Stasz, 1979; Collier

& Collier, 1986; Grim, 1979; Harper, 1988, 1994; Krauss, 1981; Kyvig & Marty, 1982; Stasz, 1979). Janke (1982) noted, "In a recent news report it was indicated that citizens of the United States purchased three million cameras per year. Thus, cameras are rather commonly found in almost all households" (p. 41). Since Janke's writing in 1982, a generation of U.S. youth has grown up with such visual stimuli as Sega (for Genesis) games, videotaped movies, and Music Television (MTV). This explosion of information in the form of visual stimuli is, according to Denzin and Lincoln (1994), leading to augmentation of--if not the eventual replacement of--print literacy with visual literacy.

As a result of not only the proliferation of visually-oriented cultural artifacts but also paradigmatic shifts in the underlying assumptions and approaches to ways of learning about phenomena of interest (see Kuhn, 1996; Schwartz & Ogilvy, 1980), researchers in several academic fields have turned their attention to how photographs can be used as data sources (Banning, 1992a, 1992b; Blinn-Pike & Eyring, 1993; Collier & Collier, 1986; Eisner, 1994; Grady, 1996; Harper, 1994; Perka, Matherly, Fishman, & Ridge , 1992; Singer, 1991; Wang & Burris, 1994). More specifically, qualitative researchers in academic disciplines such as anthropology, sociology, mass communications, and education have explored how photographs can be used to enhance inquiries into complex human phenomena.

Methodological Foundations

Inquiry, or the desire to systematically learn about phenomena of interest, often is thought of as being either conceptual in nature or empirically based. Empirically-grounded research can be partitioned further into the two subcategories of qualitative and quantitative. In this section, the

conceptual foundations for the inclusion of photography as a qualitative research method is discussed. Two areas of conceptualization are presented: alternative forms of representation and a semiotic perspective.

Alternative Forms of Representation. When discussing how sensory systems contribute to the process of how people gain knowledge or come to understand their lives, Eisner (1982) wrote:

> In order to achieve a social dimension in human experience, a means must be found to carry what is private forward into the public realm. This is achieved by employing . . . *forms of representation.* Forms of representation are the devices that humans use to make public conceptions that are privately held. They are the vehicles through which concepts that are visual, auditory, kinesthetic, olfactory, gustatory, and tactile are given public status. This public status might take the form of words, pictures, music, mathematics, dance, and the like. (p. 47)

Eisner (1982) described the relationship between forms of representation and perception as non-linear and as involving individuals situated in contexts, or their environments. Because forms of representation influence perception, the employment of multiple forms of representation--such as visual (i.e., information gained through photography) and auditory (i.e., information gained through interviewing)--has an epistemological justification; it has the potential to enhance what can be known.

Scholars such as Bruner (1990), Eisner (1982, 1991, 1994), Prosser (1996), Uhrmacher (1993), and van Manen (1990) have pointed out that much of what is known and understood

about human lives is dependent upon language as utilized in the written and spoken word. Eisner (1982, 1991, 1993, 1994), expanding on ideas put forth by Dewey (1934), posits that the uses of additional and broader forms of representation lead to richer, more complex understandings of human experiences. "Because particular forms of representation often tend to emphasize particular qualities and utilize particular sensory systems, the kind of meaning that a single form of representation can express is limited" (Eisner, 1982, p. 55).

As an additional form of representation, photographs can provide an alternative to as well as an augmentation of the "traditional," or most-widely utilized forms of representation in research that are grounded in written and spoken language. As a result of including photographs in qualitative studies, researchers can seek to gain deeper, richer, more complex understandings of people's lives. As Eisner (1994) wrote:

> Pictures portray what words may never be able to reveal. Hence, to limit one's expressive options to words, particularly to propositional language, is to limit what can be conveyed about the world in which we are interested (see Smith, 1982). (pp. 190-191)

A Semiotic Perspective. Another way of looking conceptually at photographs, which is closely related to the alternative forms of representation viewpoint, is with a semiotic perspective. Those who take a semiotic perspective toward photographs see such visual imagery as part of a broadly-defined language system (Brecheen, 1982; Dempsey & Tucker, 1994; Faccioli & Harper, 1996; Grady, 1996). Van Manen (1990) described semiotics "as the science of signs" (p. 185) and stated that "texts or signs and their structural relationships are the subject of study for semiotics"

(p. 185). Bruner (1990), in describing the functions of signs in a language system, noted that systems of signs assist in providing symbolic meanings.

When photography was initially developed, pictures were seen as mere reflections of "reality." Thus, photographs came to be seen as part of a purely representational paradigm. When taking a semiotic perspective, photographs are seen as being able to transcend a representational nature and, thereby, become part of a communications paradigm. Brecheen (1982) wrote:

> What this means for photography is that it is inappropriate to look at a photograph and ask 'what is it?' We must instead ask, 'what is being said,' and secondarily we can inquire into how it is being said. (p. 12)

Lifchez (1979), who took a semiotic perspective in teaching photography to architecture students, opened a chapter in *Images of Information* with the following quote from Susan Sontag (1977):

> People quickly discovered that nobody takes the same picture of the same thing, the supposition that cameras furnish an impersonal, objective image yielded to the fact that photographs are evidence of not only what's there but of what an individual sees, not just a record but an evaluation of the world. (p. 88)

Empirical Uses

Empirically, photographs have been used within qualitative research in two ways: as images produced by the researcher and as images produced by research participants (Blinn-Pike & Eyring, 1993; Cheatwood & Stasz, 1979; Collier, 1979; Collier & Collier, 1986; Denzin & Lincoln, 1994; Harper, 1987, 1988, 1994). Researchers have taken photographs in order to express their own thoughts and ideas as well as to try to capture those of study participants.

Photographs taken previously by research study participants primarily have been used as documents available for analysis. Some researchers, however, have provided study participants with cameras and have asked them to produce photographs as a part of the inquiry process. In this section, these empirical uses of photography in qualitative research are presented using the four classifications presented in Harper's (1987, 1988) typology: scientific, narrative, phenomenological, and reflexive.

Scientific. Photographs categorized as "scientific," are ones that are taken by researchers as well as analyzed by researchers for the purpose of categorizing parts of wholes (Harper, 1988). In practice, this use of photographs sometimes is referred to as the "cataloging approach." Some examples of photographs being used in this manner are studies on the uses of time and space, architectural change, and the layouts of towns or cities as viewed from above (i.e., using aerial photos). Proxemics, the study of the ways in which humans use intimate, personal, social, and public space (Hall, 1974) often relies directly on the scientific use of photographs as its primary method of inquiry.

Ethnographers also have relied on photography as a way of making "cultural inventories" or "cultural maps" of what they encounter "in the field" (Collier, 1979; Collier & Collier, 1986; Harper, 1988). Bateson and Mead's 1942 study *Balinese Character* is viewed as an exemplar ethnographic study in which photography was relied upon heavily (Stasz, 1979). Collier (1979) noted that the use of photography in *Balinese Character* was seen "as a reliable tool for the measurement of child development" (p. 275). In summarizing the scientific contribution that photographs make in ethnographic studies, Collier (1979) wrote, "The promise of photography is

not only that it can gather valuable research tangibles, but that the detail of the visual evidence it provides can preserve a constantly 'present' context for subsequent analysis" (p. 272).

Narrative. Photographs used in a narrative fashion also are those taken by researchers. The purpose of these photographs, however, is to "show social life as a *process* made up of social interactions" (Harper, 1988, p. 63), or to tell a story. Narrative photos utilize what Harper (1988) calls "familiar narrative conventions," such as the following of a character and the showing of events over time. Although not viewed as research per se, photo essays, such as those published in *Life* or *Look* magazines during the 1960s and 1970s, used photographs in a narrative fashion. Perhaps one of the more well-known examples of photographs being used in a narrative manner is Smith and Smith's (1975) photo essay, *Minamata*, on the effects of mercury poisoning on the people living in a Japanese fishing village.

Phenomenological. Photographs categorized as "phenomenological" are taken by researchers who "use their own subjective experience as a source of data" (Harper, 1988, p. 61). Harper (1988) noted, "Phenomenally minded sociologists and artists . . . have used photographs to explore the nature of their own perception and knowledge" (p. 66). An example of photographs used in this way is Barthes' 1981 work, *Camera Lucida*. In *Camera Lucida*, Barthes (1981) explored the question of why some photographs moved him emotionally, some appealed to him rationally, and others did neither or both.

Researchers who use photographs phenomenologically often combine them with other forms of representation--such as music--when presenting the insights they have gained to others. By using photographs as well as other non-textual forms of representation in a phenomenological

manner, the presenter is trying to evoke questions about the taken for granted aspects of people's daily lives (Harper, 1987).

Reflexive. Photographs that are reflexive are those that are taken by the people being studied; therefore, these photographs "build data from the point of view of their subjects" (Harper, 1988, p. 61). Harper (1988) wrote, "In the reflexive photographic method, the subject shares in the definition of meaning; thus, the definitions are said to 'reflect back' from the subject" (pp. 64-65). Sometimes reflexive photographs are taken as the result of the initiation of a research project and sometimes previously taken photographs are studied. The key is that the photographs are taken by study participants and that they are the primary interpreters of their photographs.

Interviews that are conducted about photographs that were taken by study participants are referred to as "photo elicitation interviews" and this interviewing process also has been referred to as "photo-interviewing" (Blinn-Pike & Eyring, 1993; Collier & Collier, 1986; Dempsey & Tucker, 1994; Harper, 1987; Tucker & Dempsey, 1991). Dempsey and Tucker (1994) wrote:

> Photo-interviews yield data different and often 'richer' data than that obtained from verbal interviewing procedures alone. Because the concrete nature of the photographs coexists with the interview queries, informants tend to respond in a more mindful fashion. (p. 61)

Ziller (1990) wrote, "[This] approach requires gross information reduction, is phenomenological, and may be the preferred representational system for subjects with communication difficulties or across cultures" (p. 35).

A widely-cited example of a study that used photographs in a reflexive manner as well as photo elicitation interviews is *Portraits and Dreams: Photographs and Stories by Children of the Appalachians* by Ewald (1985). Ewald (1985) used selected photographs made by 150 children in three schools in southeastern Kentucky and excerpts from interviews with eight students to provide rich understandings of the lives of Appalachian children and their families. Another example of the reflexive use of photographs is in a photo novella (which means "picture stories") study conducted by Wang and Burris (1994) on the lives of 62 rural Chinese women. Wang and Burris (1994) wrote, "The goal of a photo novella is to use people's photographic documentation of their everyday lives as an educational tool to record and to reflect their needs, promote dialogue, encourage action, and inform policy" (p. 171). In Wang and Burris' study, the Chinese women took pictures about their daily lives to share with others.

Research by Perka, Matherly, Fishman, and Ridge (1992) incorporated reflexive photographs taken by students at a predominantly white university in the United States with photo elicitation interviews. In the Perka et al. (1992) study, three African American undergraduate students affiliated with historically black, Greek-letter organizations and three White undergraduate students affiliated with predominantly white, Greek-letter organizations were asked to take photos of what the university meant to them. While both groups of students took photos showing the importance of academic experiences, affiliation with Greek-letter organizations, and involvement in co-curricular activities, the African American students took more photos that represented personal frustrations or challenges as well as culturally-significant events or locations than the White students. The White students tended to use a less personalized frame of reference,

"using the assumed fame of reference of the general student population" (Perka et al., 1992, p. 12). Consequently, the White students took more photographs of buildings and locations that were a part of campus history and traditions than the African American study participants.

In a study conducted by the author of this paper (Douglas, 1997a, 1997b) on first-year, African American college students' perceptions of the campus environment at a predominantly white university, reflexive photographs and photo elicitation interviews also were employed as data collection methods. Six overall impressions of the campus environment emerged: campus beauty; large campus size; consciousness of being black; influence of Greek-letter organizations; prevalence of voluntary racial and cultural separation; and preparation for the future. In the following section, the responses of those involved with this study to the visually-based form of data representation via photographs will be presented.

Responses to the Use of an Alternative Form of Data Representation

The five women (Kim, Marie, Monique, Simone, Tiffany) and five men (Daniel, Elmalik, James, Jerome, Xavier) who were participants in this study of campus environmental perceptions initially generated data by taking photographs with a disposable camera that had built-in flash capabilities. The task participants were asked to complete was as follows: *Take pictures that will illustrate your impressions of [this university] or that will help you to describe your impressions.* While engaged in the photo-taking portion of this study, the participants also recorded information, thoughts, and feelings in a notebook. Following the development and printing of their reflexive photographs, the students participated in individual interviews during which they interpreted their photographs to me (i.e., photo elicitation interviews) and small group interviews.

While the primary purpose of this study was to describe the students' impressions of the campus environment and to explore the meanings of these perceptions, a secondary purpose was to explore the usefulness of photographs produced by study participants, which later served as stimuli in interviews, in qualitative inquiry. In order to discover the study participants' reactions to utilizing a visually-based form of representation, I asked, "How did you find doing the project?" and, if necessary, the follow-up question of "How do you think the visual piece of actually taking pictures impacted you?" near the close of the photo elicitation interviews. Also, I kept on-going notes that included my thoughts about and analysis of the students' responses to the use of an alternative form of data representation.

Students' Responses

The students' reactions to the use of reflexive photographs can be clustered under two broad themes: engagement and reflection. It is apparent in the students' comments that these two themes are not mutually-exclusive. For example, Simone commented, "I thought it [participating in a study that involved taking photographs] was fun. It gave me a chance to think about different things about myself as well, so it was a learning experience for me."

Engagement. The use of reflexive photographs as key sources of data in this research were seen as intriguing by the participants and most of the students described participating in this study as "fun." Tiffany commented that being asked to take photographs "made it easy" to participate in this research. Simone noted that taking pictures made it better for the students involved in the study because it was more creative and increased enthusiasm for the project. She explained:

I think it is better for us students, you know, that you let us actually take pictures

> of what we--because if you would have just been like, 'Okay, can I talk to you about such and such and such,' I wouldn't have been as enthusiastic. . . . So that was definitely a plus: the picture taking and, you know, the journal writing and all that, it was a good idea.

Several of the students expressed gratitude for being included in this study. This appreciation seemed linked to not merely talking about their impressions of the campus environment but to showing images of their perceptions, which they could explain both in written (i.e., notebook entries) and verbal ways (interviews). Each student's impressions were seen in addition to being heard. Elmalik said at the end of his individual interview about the photographs he had taken:

> I'm just glad that I've been in several positions to actually talk and give my opinion of things, which I think is important 'cause I think maybe in a small amount it helps. . . .And I'm glad that, speaking specifically, being in this position [explaining his photographs], to give you my interpretation of an African American student here at college. I'm just happy I was able to do that.

Reflection. Several students commented on the amount of thought and reflection that was prompted in them as a result of having to take pictures. Marie was highly reflective about her impressions of the campus environment and found that participating in the study "made me think a lot about [this institution]." She thought taking photographs was helpful because, "Before I took a picture, I had to think about why am I taking this. I'm not just going around taking pictures just for the heck of it." She found that recording her thoughts and feelings in notebook entries

prompted even deeper reflections. Kim echoed some of Marie's sentiments when she said:

> It was interesting to take pictures and see what I really thought. I mean, because you think things, but it's kinda different when you actually take pictures and look at them, and write down your thoughts. . . . Some of the things you don't normally think about, about [this institution] I thought about when I did this project.

During his participation in this project, Xavier was surprised to discover that he was taking pictures "of the same thing" or of the same impressions, but at different times of the day and in different settings. He said, "That was kinda surprising to me. I think that was eye-opening about the whole thing." He liked the visual component of being asked to take photographs and thought this helped add balance to how he might express himself about the campus. He said, "I think it [taking photographs] was good. . . . I tend to get pessimistic in my writing."

Several of the students also noted the role that the photographs played during their individual photo elicitation interviews. Kim explained:

> You can think about things, but when you actually see it, it just makes it more easier to talk about. It's like a visual aid. It kinda helps you to express your feelings that you may not actually be able to put into words. You can capture it in the picture.

Jerome commented:

> It [using photographs] did help 'cause I mean it gave me a chance, like instead of like trying to find the words, to give you a situation. I have like situations just sitting out here in front of me and I can like explain them to you and like elaborate on them so you can like kinda get my point.

The amount of reflection prompted by interpretive interviews that accompany reflexive photographs was noted by Dempsey and Tucker (1994). They wrote:

> Photo-interviews yield data different and often 'richer' data than that obtained from verbal interviewing procedures alone. Because the concrete nature of the photographs coexists with the interview queries, informants tend to respond in a more mindful fashion. (Dempsey & Tucker, 1994, p. 61)

Researcher's Reflections

One of the most significant understandings I gained from using reflexive photographs in this study is about the importance of coupling these types of pictures with photo elicitation interviews--even though commentary was provided by the study participants in their notebooks. Notebook entries were important in helping to form questions during the photo elicitation interviews; however, the students often had much deeper, richer interpretations of their photographs than merely what they had written. As Elmalik pointed out, "All pieces of media that you see, it could be interpreted in any type of way depending on the individual." For this reason, it was important to ask each student to discuss each of his or her photographs.

It was evident to me from this study that talking about the participants' own interpretations of their photographs was critical. Some students took photographs that were nearly identical; however, the meanings of these photographs sometimes were significantly different when explained by each photographer. For example, both Tiffany and James took photographs that included a red sculpture by an art museum which is on campus (see the two photographs on this paper's title page). To Tiffany, this was representative of how money was

being spent on this campus, and she wanted to know more about what the structure was and why it was there. To James, the sculpture was representative of some of the beauty on campus. Without the students' interpretations of their photographs, one would be unaware of the significantly different meanings intended by the photographers.

This emphasis on understanding the students' interpretations of their photographs accentuates the idea the students were co-researchers throughout this study. The participants demonstrated high levels of investment in this project and noted this engagement was heightened because of being able to take photographs. Ziller (1990) wrote:

> It would be a grievous omission not to stress another advantage of [photo-interviewing]: subject involvement. . . . Not infrequently, the subjects request copies of the sets of photos, or request to keep the camera for an additional day or more in order to take a particularly 'important' photograph. Subject cooperation is high, and there is a general atmosphere of sincerity, perhaps because a photograph is not perceived as a throw-away response. (p. 36)

It also was clear to me that using reflexive photographs as part of the research process encouraged a deep level of reflection by the student. This reflection appeared to be directly linked to two factors: employing a method for data collection that directly involved the visual sensory mode as well as utilizing a method that prompted a greater amount of "time on task." Time on task, or the focused commitment of time as well as physical or psychological energy to the accomplishment of a certain goal, is a concept prevalent in the learning theory literature. Alexander and Murphy (1994) noted, ". . . learning is strongly influenced by the degree to which

an individual is invested in the learning process" (p. 12). In post-secondary education settings, Astin (1984, 1985) called for the use of the time-on-task concept--or involvement--to increase student learning and personal development. He posited, "The amount of educational benefits associated with any activity is directly proportional to the quality and quantity of a student's investment of time and energy" (1984, p. 298). The level of engagement demonstrated by the students in this study did, indeed, result in reflection that contributed to self-reported gains in educational benefits. As Kuh, Douglas, Ramin-Gyurnek, and Lund (1994) noted, "The single most important thing that institutional agents can do to enhance student learning is to get students to think more often about what they are doing . . . ." (p. 95). Jerome commented:

> It [participating in this study] gave me a chance to explore my thoughts, like what I actually thought about this school. . . . This gave me a chance to sit back and think, 'Okay what do I actually think about [this university] and what does it actually mean to me, myself, personally?'

In relationship to the concurring processes of collecting and analyzing data in quality inquiry, utilizing photographs contributed to my knowing when saturation was achieved not only with each individual but also collectively. Upon reviewing this photographs, Xavier noted that he had a few impressions that he was conveying again and again--just in different ways. The students who did not take all the exposures on the roll of film in their cameras explained that they had some key impressions to show me and felt they did this adequately without using all the film in the camera. By noting this, the students were telling me they reached saturation in the impressions they were trying to show or describe.

Summary

Keller (1998) wrote, "Too much of today's 'empirical' higher education research consists of abstracted arm-chair and computer findings. Actual observation of campus, practices, norms, and behavior needs to increase, *as does the use of the senses in research* [italics added]" (pp. 275-276). This paper has made a conceptual case for why a visual sensory method such as reflexive photographs can enhance the qualitative inquiry process. In addition, the responses to the use of reflexive photographs as an alternative form of data representation in a study of first-year, African American students' environmental perceptions were summarized. It is noteworthy that the participants in this study reported that employing an alternative form of data representation prompted a deep level of reflective thinking--one that they thought went deeper than if they merely had been asked to participate in interviews. Some of the students also reported the visual component increased their level of commitment to completing participation in the study. This level of commitment coupled with the deep level of reflective thinking resulted in others being able to not only hear these students' voices but also see snapshots of their lived experiences.

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